



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 1  
1 Congress Street, Suite 1100  
BOSTON, MA 02114-2023

**Memorandum**

**Date:** January 29, 2008

**Subject:** Responses to National Remedy Review Board (NRRB) Recommendations for the Non-Time Critical Removal Action for the Nuclear Metals, Inc. Superfund Site

**From:** Melissa Taylor, Remedial Project Manager *MTaylor*  
Nuclear Metals, Inc. Superfund Site

**Through:** Bob Cianciarulo, Chief  
Massachusetts Superfund Section

Mike Jasinski, Region I Representative  
National Remedy Review Board

**To:** David E. Cooper, Chair  
National Remedy Review Board

EPA Region I has reviewed the recommendations of the National Remedy Review Board (NRRB) for the Nuclear Metals, Inc. Superfund Site (Site), as were documented in a memorandum dated May 30, 2007. Region I appreciates the Board's input and will incorporate the Board's recommendations into the Engineering Evaluation/Cost Analysis (EE/CA) and Action Memo, as appropriate. Specific responses to each of recommendation are outlined below. The NRRB's recommendations are in *bold italics* followed by the regional response.

Recommendation #1:

*The materials presented to the Board suggest that some site conditions may pose imminent risks. The Board recommends that the Region consider whether the contemplated timetable for taking response actions at this site is consistent with the urgency posed by the specific circumstances (e.g., fire and electrocution hazard posed by electrical power circuits still in use throughout the buildings with leaking roofs, pyrophoric contaminants, and combustible building materials). The Region should explain its conclusions in the decision documents.*

The region continues to work with local officials, especially the Town's Fire Chief, to evaluate and address fire risks at the facility. A small fire broke out inside the Starmet plant in June 2007. Based, in part, on that event, EPA has conducted additional Removal Assessment activities to inventory and evaluate hazardous materials inside the building.



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In September and again in October 2007, the Concord Fire Department (CFD) ordered Starmet to remedy certain potential fire hazards within the building. Due to Starmet's failure to fully comply with the orders, on November 21, 2007, the Fire Department wrote a letter to EPA requesting assistance to address the fire hazards in the building that were not addressed by Starmet. Based on the CFD's request for assistance, EPA issued an Action Memo on December 21, 2007 to conduct a Time-Critical Removal Action (TCRA) to deal with these materials. The TCRA began on January 7, 2008, and is expected to be completed by this spring.

Recommendation #2:

***The package presented to the Board did not include a consideration of on-site disposal. The Board recommends that the Region include a discussion of how options for on-site temporary staging and/or disposal of demolition waste and debris were considered when assembling the alternatives presented in the engineering evaluation/cost analysis (EE/CA). The discussion should reflect technical considerations, applicable or relevant and appropriate requirements (ARARs) and local/State perspectives. The decision documents should also be explicit how the disposal option in the preferred alternative would meet the NCP program management principle to be "not-inconsistent with...the expected final remedy" (§300.430(a)(1)(ii)(B)).***

On site disposal was not initially evaluated as an alternative as it is unclear what materials may be disposed of on-site until further characterization of the materials is performed, as well as an evaluation if decontamination prior to on-site disposal is cost effective. The EE/CA has been revised to indicate that during the design of the NTCRA an evaluation of 1) whether on-site disposal is an option (either temporarily or permanently) for building materials that are not contaminated with radioactive or hazardous substances; or 2) if contaminated building materials can be decontaminated cost-effectively so that on-site disposal is the more viable option. As discussed with the RRB, the Region believes that this action is consistent with the final remedy for the site. The Action Memo will document that the disposal action in the preferred alternative will be consistent with the expected final remedy.

Recommendation #3:

***The Board notes that this high cost response action is being planned as a non-time-critical removal action (NTCRA) under CERCLA authority. The Region should address how this NTCRA is consistent with the NCP provisions addressing removal actions, and how it will be consistent with the follow-on remedial action as provided in CERCLA Section 104(c). The Board also notes there are several potentially relevant guidance documents, including but not limited to "Use of Non-Time-Critical Removal Authority in Superfund Response Actions" (Feb. 14, 2000) (EPA's policy on consultation with EPA Headquarters on removal actions with costs greater than \$6,000,000) and "Policy on Decommissioning of Department of Energy Facilities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)," U.S. Department of Energy and U.S. Environmental Protection Agency, (May 22, 1995). The Board supports the Region's plan to conduct community***

*involvement activities for this action that are substantially equivalent to those used for remedial actions.*

As discussed with the Board, the Region believes that this action is fully consistent with any expected follow-on Remedial Action. To meet the consultation requirements of the applicable guidance, the EE/CA approval memo has been drafted and was sent to the appropriate headquarters offices, and a memo from OSRTI OD Jim Woolford was received on December 7, 2007, indicating that the Region met the HQ consultation requirements for this EE/CA.

Recommendation #4:

*The Nuclear Metals facility contains many non-radioactive contaminants, both as contents of the buildings and as part of the building structures, which could be released if there were a fire or collapse of a building. However, the objectives for the removal action presented to the Board did not include objectives for these non-radiological risks. The Board recommends that the Region consider the possibility of adding objectives for non-radiological risk, including the risks associated with depleted uranium (DU), asbestos, and beryllium, based on currently available information.*

The TCRA currently underway will address the majority of non-radiological risks from non-radiological materials should a fire or collapse of the building occur. Since it is difficult to fully determine what the risks are for non-radiological substances that could be embedded in the facility structures, the non-radiological risks from the building materials will be evaluated during the characterization phase of the NTCRA.

Recommendation #5:

*The Board notes that the 10 mrem/yr removal goal is based on ARARs for building demolition during decommissioning radioactive sites, irrespective of future land use (Massachusetts Regulations for the Control of Radiation, Radiological Criteria for Unrestricted Use: 105 CMR 120.245). The Board recommends that the decision documents clarify that the use of "(t)he 10 mrem standard for building demolition does not presuppose land use assumptions for future actions at the site. The decision documents should also clarify the relationship among future land use assumptions, removal objectives, and ARARs, and their roles in establishing removal goals.*

The draft EE/CA is currently being revised and this comment will be addressed in the final version of the EE/CA and ultimately in the planned Action Memo, as appropriate.

Recommendation #6:

*The Board notes the elevated beta and alpha disintegrations per minute (dpm) count levels as reported in the package. The count levels (dpm) are higher than for depleted uranium (DU) alone. The Board recommends that the Region refine the waste characterization for this removal action to include both chemical and radiological analysis (e.g., isotopic, gamma spectrometry). This information may be critical with regard to worker safety during the action and selection of appropriate (and least costly) commercial disposal options.*

During the “design” and implementation of the Removal Action, further characterization of contaminated materials will be done to ensure proper handling and disposal of these materials.

The Region would like to thank you and all of the Board members for your input and guidance on this important project. If you have any further questions or need additional information, please feel free to contact me at 617-918-1310 or via email at [taylor.melissag@epa.gov](mailto:taylor.melissag@epa.gov).